

REMARKS/ARGUMENTS

Claims 1-19 remain in the application. Claims 1 and 13-15 stand rejected. Claims 16-19 stand allowed. Claims 2-12 stand objected to as being dependent on other rejected claims, but are otherwise allowable.

The Abstract has been amended for the purpose of reducing its word count. Its amendment does not introduce new matter.

Rejection of Claims 1 and 13-15

Claims 1 and 13-15 stand rejected under 35 USC 102(e) as being anticipated by Ishinaga, et al. (U.S. Pat. No. 6,290,334; hereinafter referred to as "Ishinaga").

With respect to Applicants' claim 1, the Examiner asserts that Ishinaga's wire bonding pads 45 are equivalent to the "data bus" recited in Applicants' claim 1. Applicants respectfully disagree. Ishinaga's FIG. 13 only shows one bonding pad, and not a plurality of bonding pads corresponding to a "bus". In col. 10, lines 15-18, Ishinaga states that "recording electric signals are supplied through the wire bonding pads 45". Applicants believe the "electric signals" referred to by Ishinaga comprise power, ground, clock and *serial* data signals. Applicants see no evidence that a plurality of bonding pads 45 correspond to the lines of a "data bus".

The Examiner also asserts that:

. . . ii) outputs of a first number of said storage elements are coupled to said data bus (col 10, lines 15-18); and iii) a second number of said storage elements comprise first and second data inputs, of which said first data inputs form a part of said shift register, and said second data inputs are coupled to said data bus (col 10, lines 15-18);. . .

10/7/2003 Office Action, pp. 2-3, sec. 3.

Applicants respectfully disagree. Each of the elements of Ishinaga's shift register 11 comprises a clock input, a serial data input, and an output. No element appears to comprise "first and second data inputs, of which said first data inputs form

a part of said shift register, and said second data inputs are coupled to said data bus".

Given Ishinaga's failure to disclose or suggest the above elements, Applicants' claim 1 is believed to be allowable over Ishinaga.

Applicants' claim 13 is believed to be allowable over Ishinaga for reasons similar to those that make Applicants' claim 1 allowable over Ishinaga. Applicants' claims 14 and 15 are believed to be allowable over Ishinaga at least for the reason that they depend from an allowable claim 13.

Given the above Remarks, Applicants respectfully request the issuance of a timely Notice of Allowance.

Respectfully submitted,
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Abstract

A printhead is provided with a data receiver and a data driver, each of which is coupled to a common data pad. The printhead is also provided with a clock pad and a data bus. Means for shifting data between the data receiver and the data driver shifts data in accordance with strobe signals received over the clock pad. Additional means transfers data from the shifting means to the data bus, and yet further means transfers data from the data bus to the shifting means.